ORRS CONTROL
OUTGOING LTR NO

92 RF 11975

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CLASSIFICATION

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HORIZED CLASSIFIER SIGNATURE
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REPLY TO RFP CC NO
1840-RF 92

ION ITEM STATUS
OPEN ☐ CLOSED
☐ PARTIAL
APPROVALS
SB MSB
G & TYPIST INITIALS
DMS/dmf

EG&G ROCKY FLATS

EG&G ROCKY FLATS INC
ROCKY FLATS PLANT P O BOX 464 GOLDEN COLORADO 80402-0464 (303) 966-7000

October 14 1992

92 RF 11975

Robert M Nelson Jr
Manager
DOE RFO

Attn S R Grace

DATA ANALYSIS FOR THE BASELINE RISK ASSESSMENT AT OPERABLE UNIT NUMBER 1 (OU1) – RLB 0655 92

Ref J K Hartman (10318) to J M Kersh Data Analysis for the Baseline Risk Assessment (BRA) at RFP Operable Unit No 1 September 14 1992

We are in receipt of the referenced letter to EG&G Rocky Flats Inc (EG&G) regarding data analysis for the BRA at OU1 EG&G is complying with DOE/RFO s request and has redirected the BRA We want to inform DOE/RFO that their direction will tend to produce an overly conservative BRA in which the human health risks will be overstated This type of conservatism may result in unwarranted remediation costs In addition this approach will be more costly than the method EG&G had intended to use

This direction constitutes a change in our technical baseline assumption that may increase our BRA costs by 25 to 30 percent While the cost impact to OU1 is relatively minor (i e an estimated $50 000 to reconfigure late in the production cycle) it would have been more costly if introduced earlier in the sequence Our greater concern as discussed below stems from the implications of BRAs in future OUs We will be evaluating the cost and schedule impacts to future OUs based on an analysis of our OU1 experience This evaluation will include the effects of implementing this new direction throughout the entire risk assessment process

EG&G wants to caution DOE/RFO with respect to their approach to characterization of the future use residential exposure scenario While it is true that a hypothetical residence is stationary and exposure arising from that location is fixed the location of the supposed residence is a random variable Consequently exposure resulting from a postulated residence can also be treated as a random rather than fixed variable Exposure integrated across the OU as EG&G had intended would account for all potential points of exposure including those arising from the source EG&G presented data aggregation methods for risk assessment (including the method originally used for OU1) with an analysis of their presence to DOE Environmental Protection Agency and the Colorado Department of Health in a Risk Assessment Technical Working Ground (RATWG) meeting on December 11 1991 At that time DOE did not express concern for EG&G risk assessment methods EG&G had

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BY G T Ostdiek
DATE 7-1-93

ADMIN RECORD

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intended to address these methods through a quantitative uncertainty analysis This method would have allowed the risk manager to observe the higher risk (including source areas) appropriately placed within the bounds of a statistically derived range of risk estimates

EG&G is concerned that the method we have been directed to use will result in an individual hazardous substance site (IHSS) by IHSS analysis of risk in other OUs We believe that this technique will obscure the point that RFP consists of a very large area with distinct and generally localized areas of contamination The method that EG&G has been directed to use will over emphasize the localized areas of contamination and downplay the risk contributed by unimpacted or relatively uncontaminated portions of each OU As mentioned previously an IHSS by IHSS risk assessment will be more costly to produce and will stress the production schedule Examples of where the IHSS by IHSS approach will require more effort than currently envisioned include

1) Identifying Contaminants of Concern (COC) IHSS by IHSS will require working the multiple step flow process for each IHSS The statistical comparisons for a multiple IHSS OU (i e OU5 or 6) would more than triple in cost compared to applying the flow process to an aggregated data set

2) Evaluating the data and quantifying individual IHSS pathway exposure models as opposed to more general compositing over logical spatial and hydrologic domains could double the exposure assessment cost

3) Developing the uncertainty analysis and presentation of the risk characterization on an IHSS by IHSS basis could more than double the cost of these elements when compared to integrating all IHSSs into a composite format

In addition an IHSS by IHSS approach will require more schedule time to perform than an integrated approach This issue could become exacerbated by our laboratory reporting and data availability operation For example it is possible that the analysis for several or all of the IGSSs could be pending upon receipt of laboratory data If all outstanding data were received late in the production schedule the risk assessor would be burdened with multiple revisions (i e IHSS by IHSS) and completions rather than one master revision and completion

If you have questions or comments regarding this letter please contact Dennis Smith of Remediation Project Management at extension 8636

R L Benedetti
Associate General Manager (Acting)
Environmental Restoration Management
EG&G Rocky Flats Inc

DMS dmf

Orig and 1 cc R M Nelson Jr

cc
F R Lockhart DOE RFO